



Used Oil Generators

Technical Guidance Document HW 99-01

The Environmental Protection Agency (EPA) has established management standards for all segments of the used oil recycling system. The regulations are found in Part 279 of Title 40 of the Code of Federal Regulations (CFR). These regulations have been adopted by KDHE in K.A.R. 28-31-16. Facilities subject to regulation are separated into generators, collection centers, transporters, processors, burners, and marketers.

Definition of Used Oil

Used oil means any oil that has been refined from crude oil, and any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities. Used oil includes, but is not limited to, materials that contain free-flowing used oil, wastewaters containing more than "de minimis" amounts of used oil, and water soluble cutting oils and coolants, and heat transfer oils. Petroleum-based antifreezes and solvents and vegetable-based oils are not considered used oil.

Used Oil Recycling

KDHE and EPA both presume that most used oil will be recycled, e.g., burned for energy recovery or re-refined. Used oil that is contaminated by being used for its intended purpose and may exhibit any characteristic of hazardous waste as a result of this use, is regulated as used oil if the used oil is recycled. If used oil is sent for disposal, the used oil is subject to the hazardous waste regulations and a hazardous waste determination must be made prior to disposal.

Used Oil Generators

A used oil generator is any person, identified by site, who act or process produces used oil or causes used oil to become subject to regulation. There is no need for a generator to obtain EPA identification number if he only generate used oil, including burning his own used oil in his space heater.

Exemptions

Except for prohibited uses and disposal of used oil, the following generators are not subject to the used oil regulations:

- Household "do-it-yourself" oil changers.

- Used oil generated on vessels that are at sea or port.
- Generators who mix used oil with diesel fuel for use in the their own vehicles.
- Farmers who generate, on average, no more than 25 gallons of used oil per month from vehicles or machinery used on the farm.

Mixtures of Used Oil and Hazardous Waste

If a Kansas or EPA hazardous waste generator mixes any amount of a listed hazardous waste with his used oil, then the entire mixture is regulated as listed hazardous waste and is subject to all the state hazardous waste management statutes and regulations.

If a Kansas or EPA hazardous waste generator mixes any amount of characteristic hazardous waste with his used oil, then the entire mixture is regulated as a hazardous waste even if the mixture no longer exhibits any hazardous characteristic. The mixture is subject to all the state hazardous waste management statutes and regulations.

If a Small Quantity Generator mixes any listed or characteristic hazardous waste with his used oil, the mixture is regulated as used oil, unless the used oil mixture exhibits any hazardous waste characteristic and will be dispose rather than recycled. A mixture being dispose is subject to all the state hazardous waste management statutes and regulations.

Note: The Kansas hazardous waste regulations for mixtures of used oils and hazardous wastes are stricter than the used oil mixture regulation and supercede the used oil regulation.

Rebuttable Presumption for Hazardous Waste Mixing

All generators of used oil are subject to the rebuttable presumption for used oil. Under the rebuttable presumption, KDHE presumes that used oil that contains more than 1,000 ppm total halogens has been mixed with listed halogen-containing hazardous waste, such as a chlorinated degreasing solvent like trichloroethylene. A generator may rebut this presumed mixing by demonstrating to KDHE that the halogens did not come from regulated hazardous waste. This is usually done by having the used oil analyzed by a KDHE certified laboratory to show that there are not significant concentrations of hazardous constituents listed in Appendix VIII of 40 CFR Part 261 present in the used oil. If the halogens came from a Small Quantity Generator mixing his halogenated waste with his used oil, the generator must demonstrate that he was a Small Quantity Generator when the mixing occurred.

There are two conditions where the rebuttable presumption does not apply:

1. The used oil is a metalworking oil/fluid containing chlorinated paraffins, e.g., cutting oils or coolants, and the oil/fluid is processed and reclaimed under a tolling agreement.
2. The used oil contains chlorofluorocarbons (CFCs) removed from refrigeration units and the used oil is being processed to recover the CFCs.

Note: CFCs from other sources that are mixed with used oil are not exempt even if the CFCs will be reclaimed.

Material Containing or Contaminated with Used Oil

Materials that contain free-flowing used oil are regulated as used oil until the used oil has been properly drained or removed to the extent possible such that no visible signs of free-flowing remain in or on the material.

Materials containing or contaminated with used oil that are beneficially reused or recycled are not wastes and are not subject to waste management regulations (for example, metal turnings from which used oil has been properly removed and then the turnings are recycled as scrap metal).

Materials containing or contaminated with used oil that are burned for energy recovery are regulated as used oil. For example, undrained used oil filters sent to a utility boiler to be burned for energy recovery are subject to all used oil regulations.

Materials containing or contaminated with used oil that are disposed are subject to the state hazardous and solid waste statutes and regulations.

Mixtures of Used Oil and Products

Mixtures of used oil and fuels or fuel products are regulated as used oil. However, a mixture of used oil and diesel fuel used by a generator in his own vehicles is not regulated as used oil after mixing.

Materials Derived from Used Oil

Materials derived or reclaimed from used oil that are beneficially used are not wastes and are not subject to waste management regulations, unless the materials will be burned for energy recovery or used in a manner constituting disposal. For example, re-refined lubricants are considered products.

Materials derived from used oil that are disposed or used in a manner constituting disposal are subject to the state hazardous and solid waste statutes and regulations. However, used oil re-refining bottoms that are used as feedstock to make asphalt are not regulated as used oil.

For information about management of wastewaters containing used oil, for information about used oil placed into crude oil pipelines or refineries or information about used oil containing PCBs, please contact the Bureau of Waste Management as shown at the end of this document.

Used Oil Fuel Specifications

Used oil burned for energy recovery and any fuel produced from used oil by processing, blending, or other treatment is regulated as used oil unless the used oil does not exceed the used oil fuel specifications listed in Table 1 below. Used oil that meets the fuel specifications below is commonly called “on-specification” or “on-spec” used oil. Used oil that does not meet the fuel specifications is commonly called “off-specification” or “off-spec” used oil. If used oil that is to be burned for energy recovery is

demonstrated to be on-spec and the person making that claim complies with the marketer requirements of 40 CFR 279.72, 279.73, and 279.74(b), then the used oil is no longer regulated as used oil.

Table 1

<u>Constituents/Property</u>	<u>Allowable Level</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100° F or higher
Total Halogen	4,000 ppm maximum ¹

¹ Used oil containing more than 1,000 ppm total halogen is presumed to be hazardous waste unless successfully rebutted as described above under Rebuttable Presumption for Hazardous Waste Mixing. Used oil containing PCBs is also subject to 40 CFR 761.20(e).

Burning Off-Specification Used Oil

Off-specification used oil may only be burned in the following units:

1. Industrial furnaces.
2. Industrial and utility boilers.
3. A generator's own used oil-fired space heater (see Technical Guidance Document (TGD) HW 98-02 for details).
4. Hazardous waste incinerators.

Burning Used Oil in On-Site Space Heaters

Used oil generators may burn their own used oil in an on-site space heater under the following conditions:

1. The generator burns only his own used oil, used oil received from do-it-yourself oil changers, or on-specification used oil from any used oil marketer;
2. The space heater's designed maximum capacity does not exceed 0.5 million Btu per hour; and
3. the exhaust gases from the heater are vented to the outside air.

For more information about burning used oil in space heaters, please read BWM's TGD HW 98-02.

Storage Requirements for Generators

Generators may store used oil in containers, underground and aboveground tanks, and in other approved storage units. All underground used oil tanks and only those aboveground used oil tanks with a capacity equal to or greater than 660 gallons at

businesses must be registered with KDHE. Please call (785) 296-8061 for registration information and requirements.

Used oil generators must comply with the following storage requirements:

1. All containers, aboveground tanks, and fill pipes for underground tanks must be labeled with the words "Used Oil."
2. All storage units must be in good condition, e.g., no leaking or severely corroded containers or tanks.
3. If applicable, a Spill Prevention Control and Countermeasures plan (SPCC) must be completed. Please call (785) 296-1600 for more information about SPCC plans.
4. Underground tanks must comply with the Kansas Underground Storage Tank regulations.

Cleanup of Releases and Spills

All generators must be prepared for accidental releases or spills of used oil. In case of a release or spill, you must:

1. Stop the release and repair or replace leaking containers, tanks, or pipes.
2. Contain the released oil.
3. Clean up and properly manage the released oil and other contaminated materials.
4. Report the incident to KDHE's Bureau of Environmental Remediation (785-296-1679) if there is a release or spill of used oil onto or into the soil or water.

Shipping Used Oil

When shipping used oil off-site, a generator must use a used oil transporter who has registered with KDHE, except under the following conditions:

1. The used oil is generated on-site or collected from household do-it-yourself oil changers, **and**
 - a. The generator transports the used oil in his own vehicle or a vehicle owned by an employee of the generator,
 - b. The generator transports no more than 55 gallons at one time,
 - c. The used oil is taken to a used oil collection center or aggregation point.
2. The used oil is transported under a tolling agreement between the generator and a used oil

processor or re-refiner, provided the used oil is reclaimed and returned to the generator for use as a lubricant, cutting oil, or coolant. The tolling agreement must specify the following:

- a. The type of used oil transported, e.g., cutting oil,
- b. The frequency of the shipments,
- c. The vehicle used to transport the used oil is owned by the processor/re-refiner, and
- d. The reclaimed oil will be returned to the generator.

Prohibited Uses and Disposal of Used Oil

Used oil may not be used as a dust suppressant, pesticide carrier, sealant or coating or for any similar purpose. Used oil may not be disposed by discharging into any sewers, storm drainage system, or surface water or groundwater, or by deposit on or under land, including landfills. These prohibitions also include all materials containing free-flowing used oil.

Note: Although the regulations specify prohibited uses and disposal of used oil as defined above, these same prohibitions generally will apply to all types of oil being disposed, whether its unused virgin product, off-specification virgin product or used oils not covered by the definition of used oil, such as vegetable oil. Spills of virgin oil product that are fully absorbed may be disposed at a permitted sanitary landfill or land-farmed with approval from KDHE.

Used Oil Filters

Non-tern plated used oil filters that are properly hot drained for 12 hours or are processed to remove all free-flowing used oil are exempt from the hazardous waste regulations and may be disposed at a permitted municipal landfill. Remember to puncture the dome or anti-siphon valve when draining spin-on type filters. KDHE encourages generators to recycle metal filters, when feasible.

Used Oil Collection Centers

Used oil collection centers collect and store used oil from generators and “do-it-yourself” oil changers. They must meet the following requirements:

- Comply with the requirements for generators listed above.
- Accept only used oil deliveries that are 55 gallons or less per shipment.
- Are either registered, licensed, permitted, or recognized by a local government to manage used oil. KDHE currently does not require any permit for these facilities.

Used Oil Aggregation Points

A used oil aggregation point is any site or facility that may accept, aggregate, and/or store used oil collected only from other used oil generators sites owned by the same owner. A used oil aggregation point may also accept used oil from “do-it-yourself” used oil changers. A used oil aggregation point must meet the following requirements:

- Comply with the requirements for generators listed above.
- Transport used oil to the aggregation point in shipments no larger than 55 gallons at one time.

For additional information regarding proper management of used oil or other wastes, you may contact the Bureau of Waste Management at (785) 296-1600 or the address at the top of this document, or visit the Bureau’s website at www.kdhe.state.ks.us/waste.